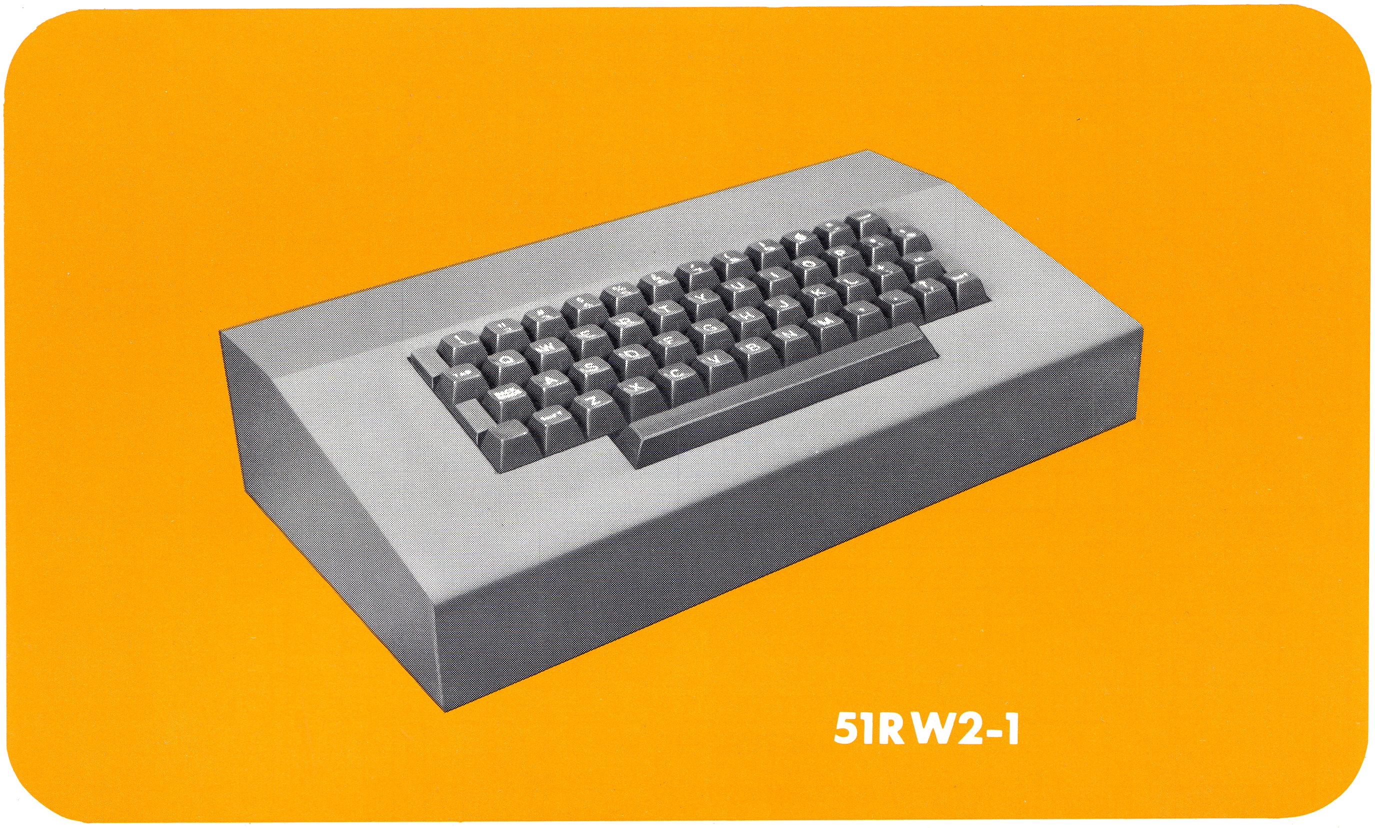
ISSUE 3

Reed Switch Keyboard | Product Sheet 51RW2-1



51RW2-1

Features

- *AVAILABLE "OFF-THE-SHELF" – READY TO INTERFACE*
- *REED SWITCH RELIABILITY*
- *SOLID STATE ENCODING*
- *USASCII CODE ASSIGNMENT*
- *ELECTRONIC INTERLOCK – TWO-KEY ROLLOVER*

This keyboard is designed to provide high reliability and long-life operation. The basic switching function is performed with hermetically sealed reed switches. These rugged switch modules are supported with rigid mounting hardware to prevent operating shock from being transmitted to termination printed circuit boards and solder connections.

Switch outputs are extended to integrated circuit encoding packs which provide an eight bit output (eighth bit is an odd parity bit). The keyboard may be interfaced with your equipment with a standard card edge connector.

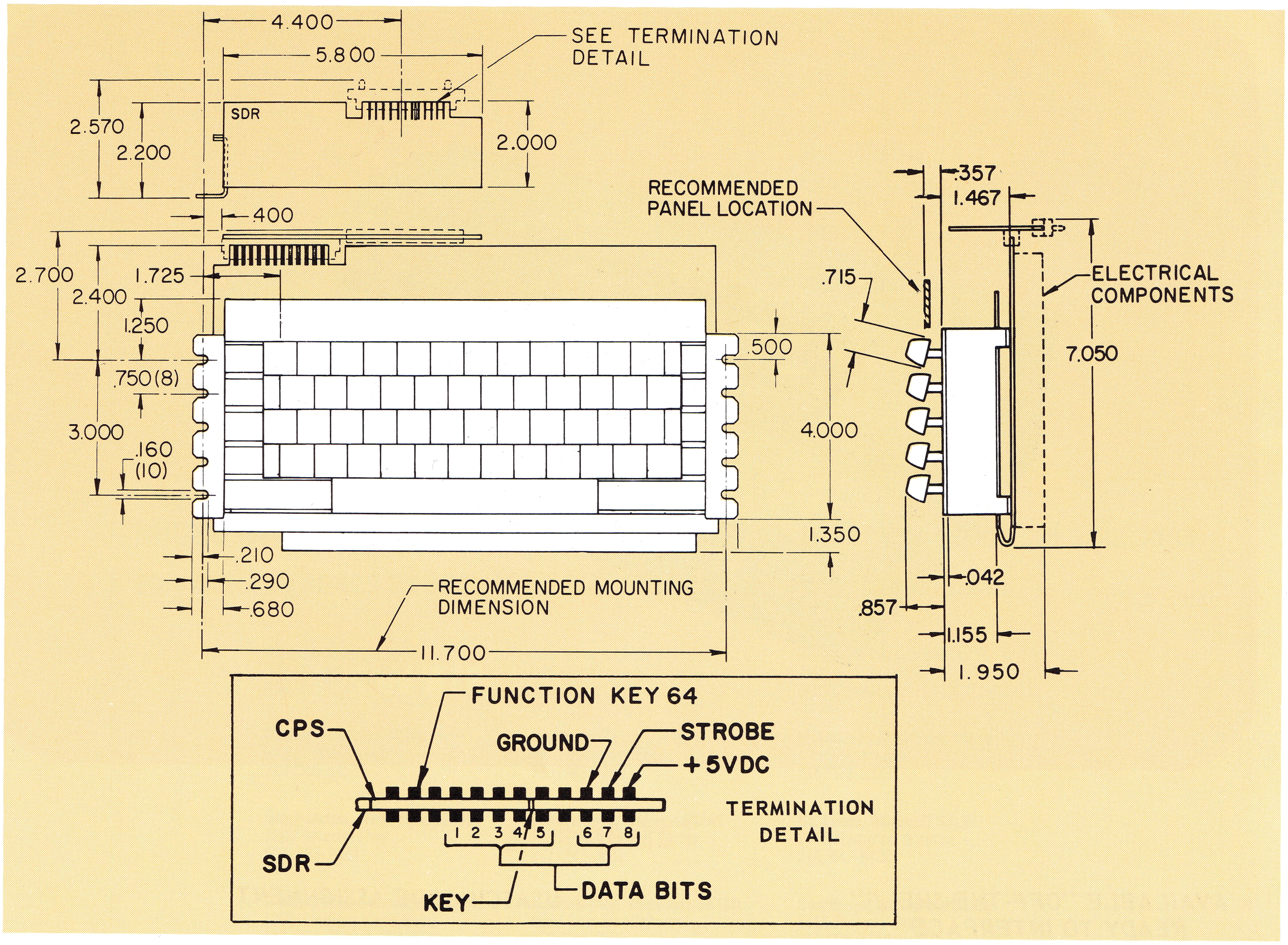
Several options are built into the keyboard, including a delayed strobe output which prevents reading of the encoded outputs during the short interval of contact bounce.

Our Two-Key Rollover option permits typing at "burst" speeds without generating a system error. It blocks the strobe signal to prevent reading of the data bits during the time that two keys are operated.

An electrical monitor detector output, which detects the operation of more than one key at a time, is available at the interface. This output may be used to drive an audible or visual error indicator.

MICRO SWITCH
FREEPORT, ILLINOIS 61032
A DIVISION OF HONEYWELL
IN CANADA: 740 ELLESMERE ROAD, SCARBOROUGH, ONTARIO

Specifications


4.400
5.800
SEE TERMINATION DETAIL
SDR
2.570
2.200
2.000
.400
2.700
1.725
2.400
1.250
.750 (8)
3.000
.160 (10)
.500
4.000
1.350
.210
.290
.680
RECOMMENDED MOUNTING DIMENSION
11.700
RECOMMENDED PANEL LOCATION
.715
.357
1.467
ELECTRICAL COMPONENTS
7.050
.042
.857
1.155
1.950
FUNCTION KEY 64
CPS
GROUND
STROBE
+5VDC
1 2 3 4 5 6 7 8
TERMINATION DETAIL
SDR
KEY
DATA BITS

ELECTRICAL DATA

Power Requirements

+5 volts DC Regulated ±5%
200 milliamps maximum

Logic Output Levels (DTL Compatible)

Logic "0": +0.45 Volts DC Max @ 12.0 MA
Logic "1": +2.6 Volts DC Min. @ 0.12 MA

Function Output (DTL Compatible)

Key Unoperated: Open Circuit
Key Operated: +4 volts DC, 10 MA

Strobe Output Level (DTL Compatible)

All keys in unoperated state: +0.45 VDC max. @ 12.0 milliamps.

One key operated: +2.6 VDC minimum @0.12 milliamps after 3 millisecond delay.

Two-Key Rollover Condition: +0.45 VDC maximum @ 12.0 milliamps.

Note: Function key does not generate strobe.

KEY ASSIGNMENTS

47 Keys encoded dual mode
1 function Key (no legend)
1 Space bar
2 Shift Keys
Plus 4 Low level ½-unit spacers

OUTPUT INTERFACE

Card-edge output accepts standard connectors such as: Cinch-Jones 251-12-30-160. This connector is furnished with a between contact key. Winchester 8BD 12 has a between contact key but a separate catalog listing 109-8597. An equivalent connector may be used.

WEIGHT

With enclosure 6.75 lbs. (approx.)
Without enclosure 2.25 lbs. (approx.)

BUTTONS

MICRO SWITCH double-shot molded, truncated, gray buttons with white legends.
Legend style is modified Gorton Normal.

KEYROW OFFSET

3/8"–3/8"–3/8" offset between rows (Keys on ¾" centers).

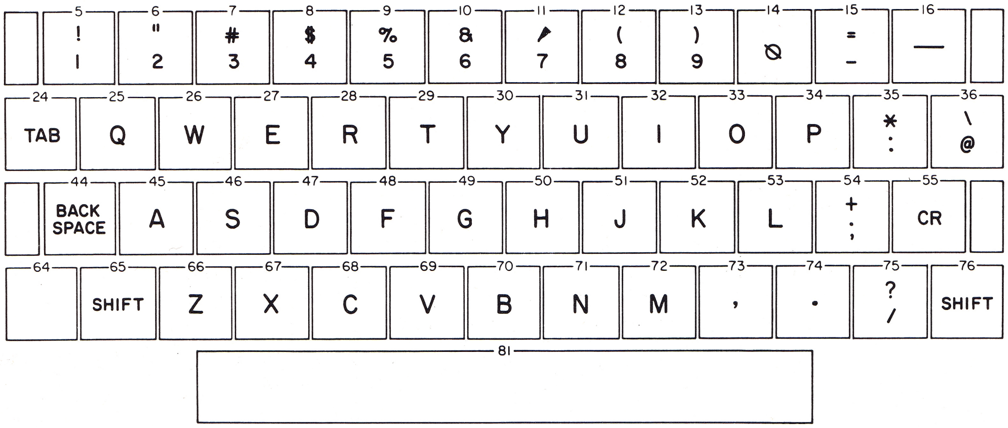
BUTTON ORIENTATION

Stepped (button tops are horizontal)

OPTIONS INCLUDED

- Two-Key Rollover (Electronic Interlock)
- Strobe (3 millisecond delay)
- Enclosure*

Code Assignment


5 ! 1
6 " 2
7 # 3
8 $ 4
9 % 5
10 & 6
11 ' 7
12 (8
13) 9
14 0
15 = -
16 —
24 TAB
25 Q
26 W
27 E
28 R
29 T
30 Y
31 U
32 I
33 O
34 P
35 * :
36 \ @
44 BACK SPACE
45 A
46 S
47 D
48 F
49 G
50 H
51 J
52 K
53 L
54 + ;
55 CR
64
65 SHIFT
66 Z
67 X
68 C
69 V
70 B
71 N
72 M
73 ,
74 .
75 ? /
76 SHIFT
81

USASCII Odd Parity

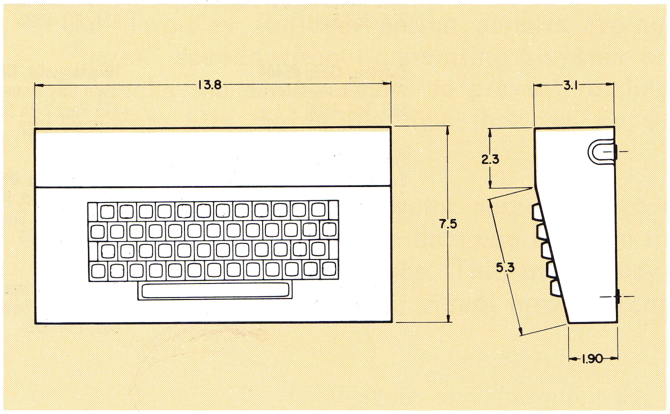
KEY NO.	UNSHIFTED MODE BITS			SHIFTED MODE BITS		
	765	4321	P	765	4321	P
5	011	0001	0	010	0001	1
6	011	0010	0	010	0010	1
7	011	0011	1	010	0011	0
8	011	0100	0	010	0100	1
9	011	0101	1	010	0101	0
10	011	0110	1	010	0110	0
11	011	0111	0	010	0111	1
12	011	1000	0	010	1000	1
13	011	1001	1	010	1001	0
14	011	0000	1	011	0000	1
15	010	1101	1	011	1101	0
16	101	1111	1	101	1111	1
24	000	1001	1	000	1001	1
25	101	0001	0	101	0001	0
26	101	0111	0	101	0111	0
27	100	0101	0	100	0101	0
28	101	0010	0	101	0010	0

KEY NO.	UNSHIFTED MODE BITS			SHIFTED MODE BITS		
	765	4321	P	765	4321	P
29	101	0100	0	101	0100	0
30	101	1001	1	101	1001	1
31	101	0101	1	101	0101	1
32	100	1001	0	100	1001	0
33	100	1111	0	100	1111	0
34	101	0000	1	101	0000	1
35	011	1010	1	010	1010	0
36	100	0000	0	110	0000	1
44	000	1000	0	000	1000	0
45	100	0001	1	100	0001	1
46	101	0011	1	101	0011	1
47	100	0100	1	100	0100	1
48	100	0110	0	100	0110	0
49	100	0111	1	100	0111	1
50	100	1000	1	100	1000	1
51	100	1010	0	100	1010	0
52	100	1011	1	100	1011	1

KEY NO.	UNSHIFTED MODE BITS			SHIFTED MODE BITS		
	765	4321	P	765	4321	P
53	100	1100	0	100	1100	0
54	011	1011	0	010	1011	1
55	000	1101	0	000	1101	0
64	FUNCTION OUTPUT					
65	SHIFT					
66	101	1010	1	101	1010	1
67	101	1000	0	101	1000	0
68	100	0011	0	100	0011	0
69	101	0110	1	101	0110	1
70	100	0010	1	100	0010	1
71	100	1110	1	100	1110	1
72	100	1101	1	100	1101	1
73	010	1100	0	010	1100	0
74	010	1110	1	010	1110	1
75	010	1111	0	011	1111	1
76	SHIFT					
81	010	0000	0	010	0000	0

ENCLOSURE

Enclosure is steel with medium blue nonglare finish. A cable strain relief is included and rubber feet are provided to prevent marring of desk tops. The base plate provides sufficient weight for stability.


13.8
7.5
3.1
2.3
5.3
1.90

Keyboard may be purchased without enclosure.

Ordering Information

Contact your nearest MICRO SWITCH Branch Office and a Field Engineer will be glad to work with you in satisfying your keyboard requirements: proper selection, pricing, and delivery scheduling. These experienced keyboard experts will provide sound and practical answers to your needs.

MICRO SWITCH Field Engineers are pleased to offer you practical solutions to your keyboard needs. Contact your nearest Branch Office.

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500 Plaster Avenue, N.E.
404/875-9561

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1810 State Street
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607/723-7993

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617/254-3939 & 254-8730

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312/478-9290

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Dallas, Texas 75206
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513/461-4480

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